



# Consideration of and Reasons for Not Obtaining Abortion Among Women Entering Prenatal Care in Southern Louisiana and Baltimore, Maryland

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## Abstract

Most research about experiences considering and seeking abortion comes from women presenting at abortion clinics. This study examines experiences among women presenting at prenatal care. Five hundred eighty-nine women were recruited at their first prenatal visit in Southern Louisiana and Baltimore, Maryland. Participants completed self-administered iPad surveys and in-clinic structured interviews. Participants were asked if they had considered abortion for this pregnancy and, if so, reasons they did not obtain one. Twenty-eight percent of Louisiana and 34% of Maryland participants had considered abortion. Ten percent in Louisiana and 13% in Maryland had called an abortion clinic; 2% in Louisiana and 3% in Maryland had visited an abortion clinic. The most common reason for not having an abortion related to women's own decision-making, i.e. their personal preferences. Policy-related reasons were less common; but more participants who had considered abortion in Louisiana than Maryland reported a policy-related reason (primarily lack of funding for the abortion) as a reason (22% Louisiana, 2% Maryland,  $p < 0.001$ ). Recruiting in prenatal care is a feasible way to find women who considered, but did not obtain, an abortion for their current pregnancy. Women's own preferences were the primary reason for not obtaining an abortion across settings, but more in Louisiana than Maryland faced policy-related barriers to abortion.

**Keywords** Abortion · Policy · Pregnancy · Health care access

## Introduction

Through the 2000s, research about state-level abortion restrictions in the USA primarily used vital statistics data to estimate changes in the abortion rate, delays in obtaining abortion, and changes in the proportion of women who travel out of state to obtain an abortion that were associated with state-level abortion

restrictions (Colman & Joyce, 2009; Joyce, Henshaw, & Skatrud, 1997). Among other findings, this research demonstrated that about one-fourth of women who would have had Medicaid-funded abortions instead give birth when this funding is unavailable (Henshaw, Joyce, Dennis, Finer, & Blanchard, 2009); that parental involvement laws are associated with an increased number of minors traveling out of state for abortion, but do not necessarily impact pregnancy or abortion rates (Dennis, Henshaw, Joyce, Finer, & Blanchard, 2009); and that while waiting periods that do not require an in-person visit have little impact, waiting periods that include a two-visit requirement are associated with a decreased abortion rate, increased travel out of state, and an increased rate of second trimester abortions (Joyce, Henshaw, Dennis, Finer, & Blanchard, 2009).

Since 2010, the landscape of abortion restrictions has changed. These changes include an increase in numbers of abortion restrictions, new and different types of abortion restrictions, and states that have multiple restrictions in place at the same time (Nash, Gold, Mohammed, Ansari-Thomas, & Cappello, 2018). Researchers seeking to understand and document the impact of state-level abortion restrictions have

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begun to complement existing research methods with newer research approaches, such as abortion-clinic-based medical chart reviews and surveys of women who present for an abortion (Roberts, Turok, Belusa, Combellick, & Upadhyay, 2016; Upadhyay et al., 2017). Research using these newer methods has found, for example, that laws passed in the name of patient safety—such as requiring medication abortion to be provided according to the original FDA protocol rather than current evidence-based protocols—resulted in a greater need for medical intervention and more side effects (Upadhyay et al., 2016). This research has also found that laws such as 72-h waiting periods and mandatory ultrasound viewing that seek to dissuade women from having abortions do not typically affect women's decision-making, but can lead to delays and increased financial and emotional costs (Roberts et al., 2016; Upadhyay et al., 2017).

With a few exceptions (Fuentes et al., 2016), the research focusing on women's experiences of abortion restrictions has primarily focused on women who obtained abortions and/or who visited an abortion clinic (Gerds et al., 2016; Karasek, Roberts, & Weitz, 2016; Purcell et al., 2014; Roberts et al., 2016). Even state-of-the-art research like the Turnaway Study and Global Turnaway Study that examine the health and socioeconomic impacts of being unable to obtain an abortion only includes women who visited an abortion clinic (Biggs, Upadhyay, McCulloch, & Foster, 2017; DePineres et al., 2017; Dobkin et al., 2014; Foster et al., 2018; Puri, Vohra, Gerds, & Foster, 2015).

Abortion clinic recruitment practices, however, do not allow an understanding of the *experiences* of women who consider abortion, but do not present for care at an abortion clinic and, more pointedly, what role, if any, abortion restrictions have in the experiences of women who do not present for care at an abortion clinic. These women's consideration of abortion could be anywhere on a spectrum, e.g., from women who only briefly considered abortion and then decided to continue a pregnancy to women who faced policy-related financial and logistical barriers to obtaining an abortion and thus were, in effect, turned away prior to presenting at an abortion clinic. We are aware of only one published study (Fuentes et al., 2016) that examined how abortion restrictions affect experiences of women who consider abortion, but may not present at an abortion clinic. Research examining experiences of women who consider abortion for a pregnancy, but do not present at an abortion clinic, can help expand on current knowledge about the impact of abortion restrictions, and to help understand whether, and to what extent, different restrictions as well as other personal, interpersonal, or other factors present a barrier to abortion. Moreover, research examining experiences of women who consider abortion, but do not present at an abortion clinic, can help identify whose experiences are missing in current research approaches that focus on women who present at an abortion clinic. In particular, research methods that include women who consider abortion, but who do not present

at an abortion clinic, may also present opportunities for understanding the experiences of women who attempt to self-induce an abortion (Jones, 2011), but who are not successful, and then continue their pregnancy.

Survey and interview-based methods that include samples of pregnant women who considered, but did not have abortions for the current pregnancy and who may not have presented at an abortion clinic, can help fill this gap. The Multistate Abortion Prenatal Study, which recruited women at their first prenatal care appointment in two geographic locations—Southern Louisiana and Baltimore, Maryland—includes such samples. In this paper, we examine experiences considering and seeking abortion among pregnant women who may not have visited an abortion clinic during this pregnancy in two states with different abortion policies.

## Methods

### Study Design

We recruited English and Spanish-speaking pregnant women 18 years and older at their first prenatal care visit at three prenatal care facilities in Southern Louisiana and one prenatal care facility in Baltimore, Maryland, between June 2015 and June 2017. Participants completed a self-administered iPad survey, followed by an in-clinic structured interview with a University of California, San Francisco research coordinator. Ethical approval was obtained from the University of California, San Francisco Institutional Review Board and the Louisiana State University Health Sciences Campus Institutional Review Board. The University of Maryland Institutional Review Board relied on the approval of the University of California, San Francisco Institutional Review Board.

### Site Selection

We initially selected Southern Louisiana in order to be able to study experiences of women who might be unable to obtain an abortion if Louisiana's Hospital Admitting Privileges Law (Guttmacher Institute, 2014) were to have gone into effect. The Admitting Privileges Law was signed into law, but did not go into effect during the study time period due to a series of injunctions (Glenza, 2014; McConnaughey, 2017). We also selected Louisiana because it had been classified as one of the most restrictive states with respect to abortion when the study began (Burns, Dennis, & Douglas-Durham, 2014). Louisiana's multiple laws restricting abortion include mandatory waiting periods and ultrasounds, a parental involvement law, a 20-week ban, and lack of state-funding to pay for abortion for low-income women (Guttmacher Institute, 2018a). At the time we began the study in 2015, Louisiana had five

abortion clinics (Guttmacher Institute, 2018a), three in the southern part of the state; by the time we finished recruitment, Louisiana had three abortion clinics, with two in the southern part of the state.

As the likelihood of Louisiana's Hospital Admitting Privileges Law going into effect during our study period became less certain, we added a comparison state. The goal of adding a comparison state was to explore if experiences of women who consider, but do not have abortions, vary across states with different abortion policy and abortion service availability environments. We selected Baltimore, Maryland—an urban area with similar demographics in terms of race/ethnicity, poverty, and birth rate to our sites in Southern Louisiana—but with very different abortion policy and access. Maryland has one law restricting abortion, a parental involvement law (Guttmacher Institute, 2018b), and importantly, Maryland uses state Medicaid funds to cover abortion (Guttmacher Institute, 2015). Prior to the start of data collection, there were 25 abortion clinics in the state of Maryland (Guttmacher Institute, 2018b) and one of these clinics closed during the study time period (Jacob, 2017). During the entire study time period, there were six abortion clinics in or directly adjacent to Baltimore, MD (ANSIRH, 2017).

The prenatal care facilities where we recruited participants were affiliated with local universities and served primarily low-income pregnant women, many of whom were eligible for Medicaid insurance for their prenatal care.

## Study Procedures

In each recruitment facility, an onsite research coordinator approached all women over 18 who spoke English and presented for their first prenatal care appointment at one of the participating sites during the study time period. Midway through the first year of recruitment, we began recruiting women who spoke Spanish. Women who were younger than 18, were not pregnant, were there for a subsequent prenatal care visit, did not speak and read English or Spanish, or were incarcerated were ineligible. The onsite research coordinator recruited all potentially eligible participants, screened them for eligibility, obtained written informed consent, and enrolled them in the study. The research coordinator then instructed participants on how to complete the self-administered iPad survey and left them to complete it independently. The research coordinator then conducted a 5 to 15-min in-clinic structured interview with participants. Participants received a \$30 gift card.

## Measures

**Outcome Variables** We first sought to examine whether women had considered abortion during their current pregnancy. Because we did not know whether women would disclose

having considered abortion (Huntington, Mensch, & Toubia, 1993; Jagannathan, 2001), we measured having considered abortion in more than one way. First, the iPad survey asked "Please think back to the week right after you found out you were pregnant. Please tell me which option you preferred the **week right after** you found out you were pregnant. Having the baby; Adoption or having someone else raise it; Having an abortion." Then, the iPad survey asked, "Next, please tell us which option you prefer **now**," with the same answer options. Then, the iPad survey asked a 16-item scale about decisional certainty (described below). Then, the iPad survey asked, "Have you considered abortion for this pregnancy even for just one second?" The research coordinator repeated the considered abortion for "just one second" question in the in-clinic interview.

To examine attempted self-induced abortion attempts, which have long been considered a marker of lack of access to legal, clinic-based abortions, the iPad survey asked, "Have you done anything on your own to try to end this pregnancy or bring back your period before you came to this clinic today?" (adapted from (Jones, 2011)). If they reported yes to an attempt to self-induce an abortion, the iPad survey then asked what method(s) they had used (Misoprostol or Cytotec, Some other drug or medication, Herbs, I hit myself in the abdomen, Something else (specify) \_\_\_\_\_).

In the in-clinic interview, the research coordinator asked participants who reported they had considered abortion "even for just one second" a series of questions on concrete actions they may have taken to seek an abortion. Specifically, the research coordinator asked whether they had called an abortion clinic, whether they had made an appointment for an abortion, and whether they went to the appointment. Research coordinators asked follow-up questions about which specific abortion clinic(s) the participant interacted with to confirm that the clinic the participant was describing was actually an abortion clinic. Because Louisiana has a two-visit requirement, LA participants were asked both whether they went to the state-mandated abortion-counseling visit (i.e., the first visit) and whether they went to the abortion appointment (i.e., the second visit). Based on these responses, variables were created to indicate if a participant called an abortion clinic and if a participant went to an abortion clinic. At the point where a participant responded that she had not undertaken the next concrete action in the series of possible actions, the research coordinator asked an open-ended question about her reason(s) for not having taken that step and to specify her main reason for not having an abortion. Research coordinators were trained to document responses verbatim and to use neutral probes for clarity as well as to obtain more detail from a participant.

**Independent Variable** Our main independent variable of interest was recruitment state.

**Potential Control Variables** Variables assessed and compared by state included both individual-level demographic characteristics as well as pregnancy-related and health-related characteristics that could vary by state and also be related to experiences considering and seeking abortion and thus explain differences across state. These included demographic and socioeconomic status characteristics: age (continuous), race (categorical), education (categorical), insurance status (categorical), food insecurity (dichotomous) (Urban Institute, 2002), housing insecurity (dichotomous) (Urban Institute, 2002), insurance type (categorical). They also included pregnancy-related factors: pregnancy intentions for this pregnancy (continuous) (Barrett, Smith, & Wellings, 2004), decisional certainty for the pregnancy decision for this pregnancy (continuous) (O'Connor, 1993), parity (categorical), previous abortion (dichotomous), relationship with the man involved in the pregnancy (categorical). They also included child-welfare related, mental health, and substance use factors: previous Child Protective Services (CPS) involvement (dichotomous), past 12-month alcohol use disorder risk (California Department of Health Care Services, n.d.), binge drinking, any illicit drug use, and tobacco use, and history of depression (dichotomous), history of anxiety (dichotomous).

### Power Calculation

Based upon our initial study design, we calculated a sample size to be able to compare the proportion of pregnancies that were unintended from before to after Louisiana's Hospital Admitting Privileges Law, if that law had gone into effect, hypothesizing that the law would impact that proportion. Following the recognition that the law was unlikely to go into effect and recognizing our need for a comparison site, we estimated our needed sample based on preliminary estimates of the proportion of Louisiana participants who reported that they had called an abortion clinic (~16%). We hypothesized that the proportion would be lower in MD, and estimated that we would need 269 participants in LA and 296 participants in MD to detect an 8% difference between the two states (Fig. 1).

### Data Analysis

Open-ended responses to in-clinic structured interview questions about why the participant did not obtain an abortion were coded by two coders (SR & JH) separately, and discrepancies were resolved through consensus. The responses were classified into a-priori categories informed by the social ecological model (Sallis & Owen, 2002) of personal reason, interpersonal reason, healthcare/other organization interaction, and policy-related reason. Responses could fall into more than one category.

Analyses were primarily descriptive. To assess for potential confounding by different participant characteristics across

states, we first conducted comparisons of participant characteristics across states using *t* tests for continuous and chi-square tests for dichotomous and categorical variables. We then compared outcomes across states, first using chi-square tests, then logistic regression with state as the main predictor, adjusting for participant characteristics that varied across states at a  $p < 0.10$  level, as well as those that we had conceptual reasons to include in the model (i.e., age and relationship with the man involved in the pregnancy), and using clustered standard errors [using Stata's `vce(cluster)` command] to account for non-independent observations within recruitment facility. We did not include education in the multivariable models as it was too closely related to other measures of socioeconomic status included in the model (employment, housing insecurity, and public assistance receipt). We did not use multivariable modeling for exploratory subgroup analyses that considered outcomes of preferring abortion now and self-induction among those who had considered abortion, due to small sample sizes.

## Results

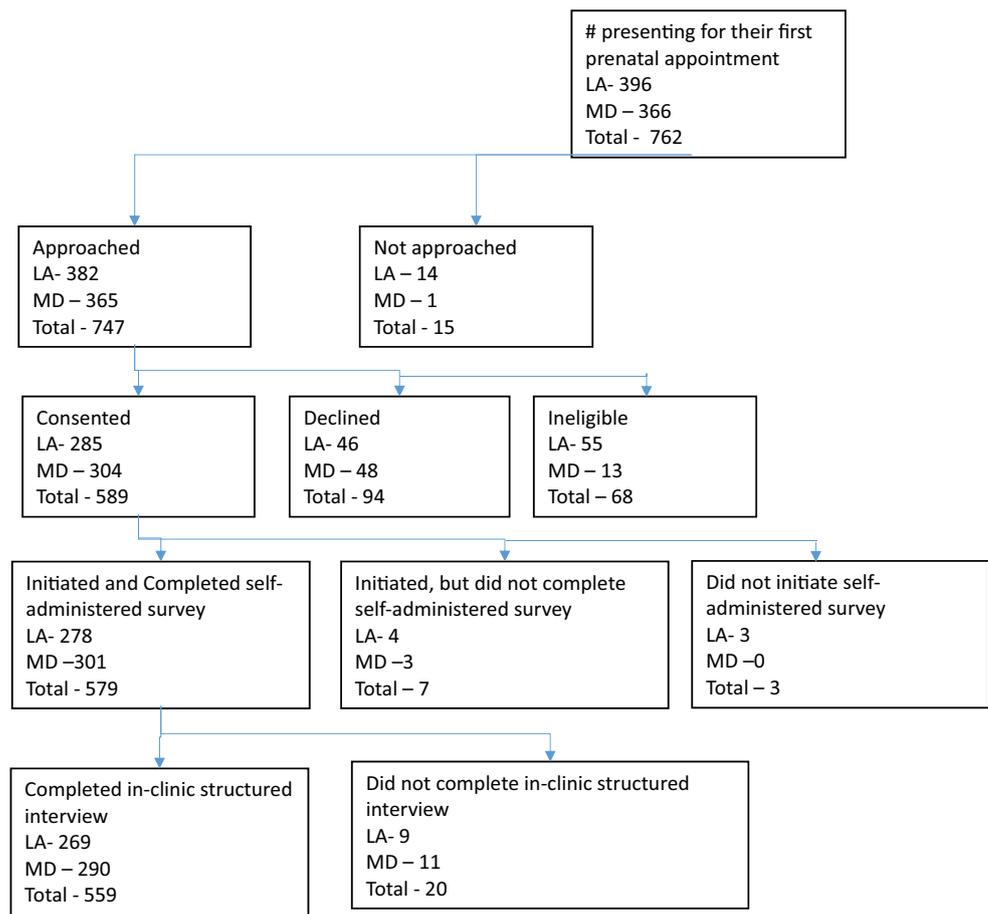
### Participation

We approached 386 women in Southern Louisiana (LA) and 367 in Baltimore, Maryland (MD), which represented 97% and 100% of all potentially eligible women who presented for their first prenatal care appointment during study recruitment. Of those approached, 14% in LA and 4% in MD were ineligible due to age, not speaking English or Spanish, or having a nonviable pregnancy. Of those who were eligible, 86% in each state (285/331 in LA and 304/352 in MD) consented to participate. Of those who consented, 99% ( $n = 586$ ) initiated the iPad survey, 98% ( $n = 579$ ) completed the iPad survey, and 95% ( $n = 559$ ) completed both the iPad survey and the in-clinic interview. Reporting having considered abortion in the iPad survey was not associated with completing either the iPad survey or in-clinic interview.

### Sample Description

Across both states, most study participants reported their race as Black, had a high school education or attended some college, and received public assistance and/or Medicaid insurance (see Table 1). Most had been pregnant previously and had had one or more previous live births; a substantial minority reported a previous abortion and about 10% had been involved with Child Protective Services in the past. A substantial minority were food and/or housing insecure. The man involved in the pregnancy was most commonly a boyfriend or partner. Women were mostly ambivalent about their pregnancies, but were, on average, sure about their decision to

Fig. 1 Study flow diagram



continue the pregnancy. Substance use in the past year was common, with more than a third reporting binge drinking, more than a fourth reporting tobacco use, and about a fifth reporting illicit drug use. About one in seven reported anxiety or depression.

Samples were mostly similar across states, with a few exceptions (see Table 1). There were more Black women, more women completing high school or having some college, more previous births, and more previous abortions in Maryland. Women in Maryland were also more likely to report a history of depression, employment, public assistance receipt, and Medicaid insurance.

### Considering and Seeking Abortion

Overall, 28% ( $n = 74$ ) of participants completing both the iPad survey and the in-clinic interview in Louisiana and 34% ( $n = 100$ ) in Maryland reported having considered abortion in response to one or more of the questions in the iPad survey and in-clinic interview (see Fig. 2). There did not appear to be a mode difference in reporting, with 94% consistency in Louisiana and 93% in Maryland.

Regarding concrete actions taken toward obtaining an abortion, overall, 17% ( $n = 46$ ) of Louisiana participants and

21% ( $n = 62$ ) of Maryland participants completing both the iPad survey and the in-clinic interview said they considered abortion, but did not call an abortion clinic. Ten percent ( $n = 28$ ) of Louisiana participants and 13% ( $n = 38$ ) of Maryland participants called an abortion clinic. Two percent ( $n = 6$ ) of Louisiana participants and 3% ( $n = 10$ ) of Maryland participants went to an abortion clinic appointment. (For the Louisiana participants, it was for the first of the two required visits, often called the abortion information visit; no participants in Louisiana went to the second visit, i.e., the abortion appointment.) While the overall distribution differed, there was no statistically significant difference in either the unadjusted or adjusted models across states in the proportion who called a clinic or in the proportion who went to an abortion clinic (see Table 2).

### Preference for Abortion

Thirteen percent ( $n = 38$ ) of those who initiated the iPad survey reported preferring abortion for this pregnancy at the time of pregnancy discovery in Louisiana and 17% ( $n = 52$ ) in Maryland (not statistically significant) (see Table 2). In the full sample, 2% ( $n = 5$ ) of Louisiana participants and 1% ( $n = 3$ ) of Maryland participants reported

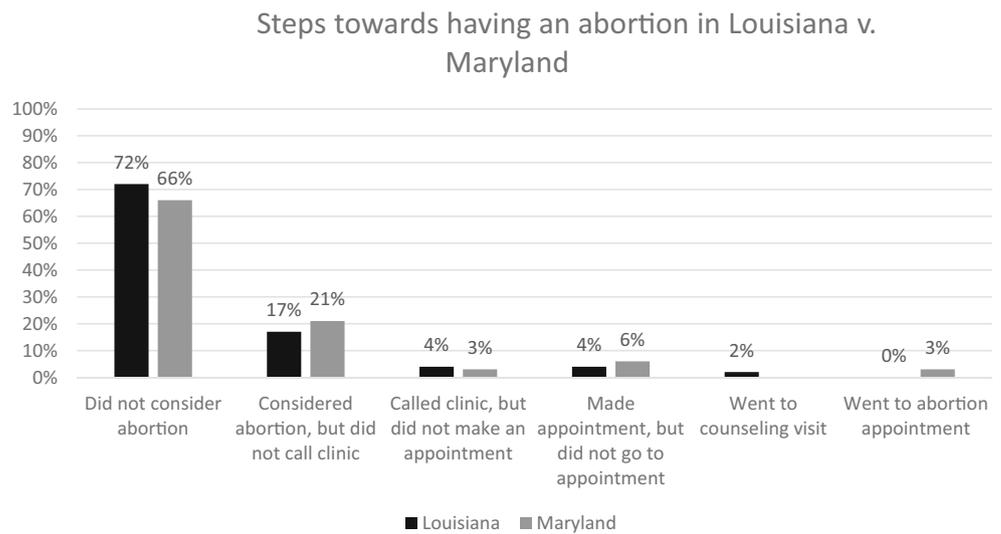
**Table 1** Participant characteristics

	Total <i>n</i> ( <i>n</i> = 586)	Total ( <i>n</i> = 586)	Louisiana ( <i>n</i> = 282)	Maryland ( <i>n</i> = 304)	<i>p</i> value
Age mean (SD)	586		27.0 (5.8)	26.9 (5.3)	0.846
Race	585				< 0.001
White		45 (8%)	24 (9%)	21 (7%)	
Black		461 (79%)	201 (71%)	260 (86%)	
Hispanic		55 (9%)	43 (15%)	12 (4%)	
Other		24 (4%)	14 (5%)	10 (3%)	
Education	585				0.045
< high school		120 (21%)	70 (25%)	50 (17%)	
High school or GED		286 (49%)	130 (46%)	156 (51%)	
Some or completed college		179 (31%)	82 (29%)	97 (32%)	
Parity	585				0.032
0		184 (31%)	103 (37%)	81 (27%)	
1		148 (25%)	69 (24%)	79 (26%)	
2+		253 (43%)	110 (39%)	143 (47%)	
Previous abortion	583	165 (28%)	50 (18%)	115 (38%)	< 0.001
Decisional conflict mean (SD)	572	10.3 (13.8)	11.2 (15.1)	9.6 (12.5)	0.166
LMUP mean (SD)	582	7.0 (2.9)	6.8 (2.9)	7.1 (12.9)	0.236
Trimester entered care	578				
1st trimester		417 (72%)	203 (74%)	214 (71%)	0.109
2nd trimester		130 (22%)	54 (20%)	76 (25%)	
3rd trimester		31 (5%)	19 (7%)	12 (4%)	
CPS involvement	583	56 (10%)	22 (8%)	34 (11%)	0.160
Binge drinking	577	205 (36%)	88 (32%)	117 (39%)	0.080
Audit C positive	579	153 (26%)	68 (24%)	85 (28%)	0.303
Drug use	576	112 (19%)	45 (16%)	67 (22%)	0.074
Tobacco use	572	164 (29%)	78 (28%)	86 (29%)	0.876
Anxiety	580	78 (13%)	33 (12%)	45 (15%)	0.271
Depression	580	93 (16%)	34 (13%)	59 (20%)	0.015
Employment	584				0.009
Unemployed		286 (49%)	147 (52%)	139 (46%)	
Employed part time		122 (21%)	66 (23%)	56 (18%)	
Employed full time		176 (30%)	68 (24%)	108 (36%)	
Food insecure	578	271 (47%)	134 (48%)	137 (46%)	0.491
Housing insecure	578	172 (30%)	93 (34%)	79 (26%)	0.054
Public assistance	574	434 (76%)	175 (64%)	259 (86%)	< 0.001
Insurance	578				< 0.001
Uninsured		88 (15%)	73 (26%)	15 (5%)	
Employment-based/other		58 (10%)	29 (10%)	29 (10%)	
Medicaid		432 (75%)	175 (63%)	257 (85%)	
Relationship with MIP	580				0.177
Husband/fiancé		166 (29%)	82 (29%)	84 (28%)	
Boyfriend/partner		315 (54%)	142 (51%)	173 (57%)	
Ex/friend/none/don't know		99 (17%)	55 (20%)	44 (15%)	

preferring abortion now, i.e., upon prenatal care entry (not statistically significant). Restricting the sample to those who reported preferring abortion upon pregnancy discovery, 11% ( $n = 4/38$ ) of Louisiana and 2% ( $n = 1/52$ ) of

Maryland participants still preferred abortion now ( $p = 0.078$  in unadjusted model) (see Table 2); one Louisiana participant and two Maryland participants had not preferred abortion initially, but preferred it now.

**Fig. 2** Steps toward having an abortion in Louisiana vs. Maryland



### Self-Induction

Three percent ( $n = 9$ ) of Louisiana participants who initiated the iPad survey and 1% ( $n = 3$ ) of Maryland participants reported having attempted to self-induce an abortion ( $p < 0.001$  in adjusted model) (see Table 2). When limited to those who reported considering abortion on the iPad survey, this was 11% ( $n = 7/66$ ) in Louisiana and 3% ( $n = 3/96$ ) in Maryland ( $p = 0.052$  in unadjusted model). Two participants in Louisiana reported attempting self-induction and did not report having considered abortion. Two participants in each state reported attempting self-induction and that they considered abortion, but did not

report preferring abortion upon discovering pregnancy. In Louisiana, of the nine participants who reported attempting self-induction, 0 reported using misoprostol, three other herbs, three hit self in abdomen, and three other/not stated. In Maryland, of the three participants who reported attempting self-induction, 0 reported misoprostol, two other herbs, 0 hit self in abdomen, and one other/not stated.

### Reasons for Not Having an Abortion

Participants gave reasons for not obtaining an abortion that fell into all four of the a-priori categories of the social

**Table 2** Unadjusted and adjusted models for women's experience considering and seeking abortion

	Unadjusted				Adjusted			
	LA (%)	MD (%)	<i>p</i> value	<i>n</i>	aOR	<i>p</i> value	95% CI	<i>n</i>
Considered abortion for at least one second (iPad)	22	30	0.034	581	1.15	0.265	0.90–1.48	570
Preferred abortion at pregnancy discovery	13	17	0.204	583	1.24	0.379	0.77–1.99	571
Prefer abortion now	2	1	0.421	583	0.70	0.496	0.26–1.94	572
Prefer abortion now among those who preferred abortion at pregnancy discovery	11	2	0.078	90	–	–	–	–
Called an abortion clinic	10	13	0.324	559	1.17	0.480	0.75–1.82	551
Visited an abortion clinic	2	3	0.388	559	1.46	0.249	0.77–2.78	551
Self-induction	3	1	0.060	581	0.20	<0.001	0.11–0.40	572
Self-induction among those who considered abortion for at least one second (iPad) <sup>a</sup>	11	3	0.052	162	–	–	–	–

Unadjusted *p* values are based on chi-square tests or Fisher's exact tests. Adjusted models, with the exception of preferring abortion now and self-induction, adjust for age, race, parity, previous abortion, binge drinking, drug use, depression, relationship with the man involved, employment, housing insecurity, public assistance, and insurance status and account for clustering by site. Models for preferring abortion now among the total sample and self-induction among the total sample control for the same variables with the exception of race, employment, and insurance status. The model for visited an abortion clinic uses a three- rather than four-category variable for race/ethnicity as the "other" race category was collinear

<sup>a</sup> We used considered abortion for at least one second as the denominator here because restricting it to those who said they preferred abortion at pregnancy discovery removes four people from the numerator, two in LA and two in MD

ecology model: personal, interpersonal, healthcare/other organization interaction, and policy-related. Personal reasons included those related to the participant's preferences, including deciding that she wanted to have the baby and/or parent as well as deciding that they did not want to have an abortion (Table 3).

"Because I want a baby. I may not be ready, but you know whatever happens happens and it will all fall into place" – White, 22 yrs, 0 previous births, Louisiana

"Cause in my damned mind I decided that I wanted to keep them" – Black, 31 yrs, 2 previous births, Maryland

"I don't believe in [abortion]" – Black, 26 yrs, 0 previous births, Maryland

"I wouldn't be able to live with myself" – Other/multiracial, 30 yrs, 2 previous births, Maryland

"I just don't see myself doing that again. It's not a good experience" – Black, 25 yrs, 2 previous births, Maryland

Interpersonal reasons included instances of others swaying them as well as instances of women making joint decisions with another person, most typically the man involved in the pregnancy. They were typically based on actual interactions, but sometimes also included a perception of what others would think. Like personal reasons, they also included reasons related to affirmatively deciding to have the baby and/or parent as well as those related to deciding to not have an abortion.

"My kids, they want another sibling. They were excited to hear the news, even if I wasn't as excited." – Other/multiracial, 37 yrs, 2 previous births, Louisiana

"My aunt, I asked her about it and she begged me not to do it. She told me to send my baby to her. I felt bad. She begged me and if she begged me, then I felt like this child was important. You shouldn't abort your children. I said, well, I want my baby." – Black, 22 yrs, 1 previous birth, Louisiana

"Me and my husband talked about it and decided even though it was unplanned God had a plan" – Black, 28 yrs, 1 previous birth, Maryland

"Cause my husband snatched the phone [when I was making the appointment for the abortion]. It wasn't what he wanted" – Black, 25 yrs, 2 previous births, Maryland

Healthcare/other organizational reasons included interactions with a health care provider or other organization that swayed the participant away from having an abortion.

"Because I had so many C sections, [having an abortion] was a health risk" – Black, 29 yrs, 2 previous births, Maryland

"They told me that I would have to go to Shreveport for the pill and even after that ultrasound that they may decide that I can't do the pill if they don't like what they see...They also don't...offer any kind of anesthesia or pain pills. The doctor also plays some pretty raunchy rap music while she does the procedures." – White, 27 yrs, 0 previous births, Louisiana

"Because I wanted to be put to sleep and they couldn't do that." – Black, 24 yrs, 2 previous births, Maryland

**Table 3** Reasons for not having an abortion among the total sample and among those who considered abortion

	Unadjusted			Adjusted				
	LA (%)	MD (%)	<i>p</i> value	<i>n</i>	aOR	<i>p</i> value	95% CI	<i>n</i>
Among total sample who completed the in-clinic interview ( <i>n</i> = 559)								
Did not consider abortion	72	66	0.075	559	0.94	0.764	0.64–1.38	551
Considered abortion								
Personal reason	19	28	0.017	559	1.34	< 0.001	1.25–1.45	551
Interpersonal reason	6	5	0.690	559	0.72	0.410	0.33–1.57	551
Healthcare/other org reason	3	3	0.723	559	1.29	0.484	0.63–2.65	551
Policy reason	6	1	0.001	559	0.08	< 0.001	0.04–0.18	551
Among those who reported considering abortion in the in-clinic interview ( <i>n</i> = 156)								
Personal reason	78	91	0.019	156	2.45	0.113	0.81–7.41	156
Interpersonal reason	22	16	0.290	156	0.63	0.301	0.26–1.52	156
Healthcare/other org reason	10	10	0.946	156	1.57	0.420	0.52–4.74	156
Policy reason	22	2	< 0.001	156	0.06	< 0.001	0.04–0.10	156

Unadjusted *p* values are based on chi-square tests or Fisher's exact tests. Adjusted models for personal reason and interpersonal reason in the whole sample adjust for age, race, parity, previous abortion, binge drinking, drug use, depression, relationship with the man involved, employment, housing insecurity, public assistance, and insurance status and account for clustering by site. All other models do not adjust for race due to sample size and co-linearity

Policy-related reasons women reported for not having an abortion included citing factors related to the policy and abortion service availability environment such as lack of money to pay for the abortion or insurance not covering abortion (due to legal restrictions on what Medicaid and private insurance plans can cover), running up against gestational limits (specified by law and law-related clinic policy), having to make—and pay for—two separate visits to the clinic (due to a two-visit legal requirement), and lack of local clinics (due to the complexity of opening and keeping open an abortion clinic in a complicated regulatory environment). One woman in Maryland reported that she had been unable to obtain an abortion earlier in her pregnancy because she was incarcerated and the jail/prison did not facilitate her abortion care. Policy-related reasons of difficulty paying for the abortion and exceeding gestational limits predominated in LA.

“...It was going to cost \$2600.” – Black, 23 yrs, 0 previous births, Louisiana

“My insurance wouldn’t cover it” –Black, 26 yrs, 2 previous births, Maryland

“Because the lady said it was \$125 [for the ultrasound to check my gestational age] and if I was over 18 weeks [and therefore couldn’t get the abortion], that it would be nonrefundable...Probably the only reason is because I was over the amount of days or weeks or whatever” – Black, 21 yrs, 1 previous birth, Louisiana

“I went to the counseling session and left because I didn’t want to stay 6 hours and [pay] \$50.” – Black, 35 yrs, 2 previous births, Louisiana

Among all women entering prenatal care and completing both the iPad survey and the in-clinic interview, personal reasons were the most common reason for not having an abortion across both settings [19% ( $n = 52$ ) Louisiana and 28% ( $n = 81$ ) Maryland,  $p < 0.001$  in adjusted models]. There was no difference in invoking of interpersonal reasons [6% ( $n = 15$ ) Louisiana, 5% ( $n = 14$ ) Maryland] or healthcare/other organization reasons [3% ( $n = 7$ ) Louisiana, 3% ( $n = 9$ ) Maryland] across sites. Policy reasons were more common in Louisiana than in Maryland [6% ( $n = 15$ ) Louisiana, 1% ( $n = 2$ ) Maryland,  $p < 0.001$  in adjusted models]. Restricting the denominator to those who reported considering abortion, the overall pattern of findings is similar, although the difference for personal reasons between states is no longer statistically significant. The difference in rates of reporting a policy-related reason for not having an abortion, however, is stark: almost one-fourth (22%,  $n = 15$ ) of women who reported considering abortion in the in-clinic interview in Louisiana reported a policy reason for not having an abortion, as compared to 2% ( $n = 2$ ) in Maryland ( $p < 0.001$  in adjusted model).

Although the open-ended format of the question allowed women to offer multiple reasons for not obtaining an abortion, of women considering abortion, most (75%,  $n = 118$ ) reported reason(s) that fell into only one category. About one-quarter (24%,  $n = 37$ ) offered reasons that fell into two categories and 1% ( $n = 2$ ) offered reasons that fell into three categories. Offering reasons that fell into just one category was less common in Louisiana than Maryland [66%, 31%, and 3% ( $n = 43, 20, 2$ ) in Louisiana vs. 81%, 19%, and 0% ( $n = 72, 17, 0$ ) in Maryland]. Forty-nine percent ( $n = 32$ ) of Louisiana participants and 73% ( $n = 65$ ) of Maryland participants who reported considering abortion in the in-clinic interview reported only a personal reason(s), 9% ( $n = 6$ ) of Louisiana and 1% ( $n = 1$ ) of Maryland only a policy reason(s), and 8% ( $n = 5$ ) of Louisiana and 0% ( $n = 0$ ) of Maryland personal and policy reasons.

Conceptualizing the concrete actions women could take toward abortion as a sequential process (i.e., calling a clinic, going to a clinic appointment, having the abortion), personal reasons for discontinuing action to obtain an abortion were the most common across all concrete actions in both Louisiana and Maryland. The exception to this pattern is among women who went to the clinic in Louisiana, for whom the frequency of policy reasons and of personal reasons was similar. While women reported policy reasons for discontinuing the process of seeking an abortion at all stages of the process in Louisiana, policy reasons were most common among women who got as far as presenting for care at an abortion clinic. No woman who presented for care at a clinic in Maryland provided a policy reason for not having an abortion, and policy reasons, already rare in the Maryland sample, were typically only reported among Maryland women who called a clinic and made an appointment [results not shown].

## Discussion

This study makes three key contributions. First, this study found that having considered abortion is not uncommon among a sample of primarily low-income women entering prenatal care in both Louisiana and Maryland, and that some women who experienced policy-related barriers to obtaining an abortion had not visited an abortion clinic prior to entering prenatal care. This indicates that low-income women in prenatal care are willing to report and discuss their experiences considering and seeking abortion with researchers and, thus, that recruiting in prenatal care is a feasible approach to explore and examine experiences of pregnant women who consider an abortion, but may never present for care at an abortion clinic. This study also indicates that research estimates of numbers of women who do

not have an abortion due to restrictive laws that are calculated from women who visit or interact with an abortion clinic (e.g., call the clinic) underestimate the true number of women affected by abortion restrictions.

Second, our study found that, while still rare, low-income women in Louisiana (a state with multiple abortion restrictions) were about six times as likely as low-income women in Maryland (a state with few abortion restrictions) to report a policy-related barrier to obtaining an abortion. When restricted to those who had considered abortion, findings suggest that low-income women who consider abortion in Louisiana may be up to 10 times as likely to experience a policy-related reason for not having an abortion as low-income women who consider abortion in Maryland. Notably, the policy-related barriers that women from both states described were primarily material and structural, i.e., those related to limitations on public and private insurance coverage for abortion, gestational limits, and two-visit requirements. They were not policies targeting women's decision-making. This pattern of findings is consistent with extant literature that indicates that the restrictions that create financial and logistical barriers to abortion care—such as restrictions on Medicaid funding for abortion, gestational age limits, and two in-person-visit requirements—limit women's ability to obtain an abortion, whereas laws targeting women's decision-making—such as mandatory ultrasound viewing and waiting periods—mostly do not (Cook, Parnell, Moore, & Pagnini, 1999; Hajri, Raifman, Gerds, Baum, & Foster, 2015; Joyce et al., 2009; Puri et al., 2015; Roberts et al., 2016; Upadhyay et al., 2017; Upadhyay, Weitz, Jones, Barar, & Foster, 2014).

Third, our findings illustrate that many women who consider abortion nonetheless decide that continuing the pregnancy is the right decision for them. This confirms that considering more than one pregnancy outcome option is common among pregnant women. It is important to emphasize, though, that most women in our study who considered abortion and then decided to continue the pregnancy made their pregnancy outcome decision prior to presenting for care, either prenatal or abortion. Only a very small percent continued their pregnancy after visiting an abortion clinic. By women's reports, the decision to continue the pregnancy after visiting an abortion clinic was typically influenced by structural and material barriers in Louisiana and by women's own decisions in Maryland. The fact that we did not find a large number of women by recruiting from prenatal care who had decided to continue a pregnancy after visiting an abortion clinic is consistent with previous research that has found that few women who attend a mandatory abortion information visit or attend the abortion appointment decide to continue the pregnancy and that those who do were typically conflicted

about their decision when they presented for care (Cameron & Glasier, 2013; Gatter, Kimport, Foster, Weitz, & Upadhyay, 2014; Roberts et al., 2016; Upadhyay et al., 2017).

There are a number of limitations to this research. First, our measure of policy-related reasons for not obtaining an abortion is imprecise for two reasons. First, our classification of reasons as policy-related is likely only the tip of the iceberg, as we did not include the ways in which policy environments may indirectly influence women's preferences, e.g., by stigmatizing abortion as a personal choice. Initial evidence of this effect can be seen in the responses of women who cited personal or interpersonal reasons for not having an abortion. These reasons sometimes appeared to reflect negative views about abortion as a pregnancy outcome, a perception which could be influenced by a policy environment that constructs abortion negatively. Second, participants themselves did not directly mention policies; we inferred the policy-related origin of reasons, such as attributing responses mentioning lack of funding as related to restrictions on Medicaid coverage of abortion care. If these women were not eligible for Medicaid for other reasons—such as having income above the pregnancy-related Medicaid cutoff—our policy-related reasons would inaccurately have included them.

Second, data about considering abortion are based on self-report and may be under-reported. If stigma plays a role in women's willingness to disclose having considered abortion, we might expect more under-reporting in Louisiana than in Maryland, given that abortion is less common in Louisiana than Maryland (Finer & Kost, 2011) and the policy environment toward abortion is more hostile in Louisiana than Maryland (Burns et al., 2014). If that were the case, this would mean that the proportion of women considering abortion would go up more in Louisiana than in Maryland. Nonetheless, as the proportion of women reporting a policy reason for not having an abortion is still higher among the total sample in Louisiana than in Maryland, the substantive conclusions would not change even if more women in Louisiana than Maryland were under-reporting having considered abortion. We also note that the consistency in reporting modes was similar across states. If reporting having considered abortion was more stigmatized in Louisiana than in Maryland, we would expect to see less consistency across reporting modes (i.e., self-administered vs. interviewer administered) in Louisiana.

Third, while our sample size was sufficient to detect effects across states, it may not have been sufficient to identify rarer events, such as being dissuaded from having an abortion due to mandated ultrasound viewing or mandated waiting periods, which research shows is extremely rare, to the extent it occurs at all (Roberts et al., 2016; Upadhyay et al., 2017).

Fourth, the question of sample size is also relevant to two of the outcomes we explored in the study—preferring abortion

now and self-induction. We note that the numbers for these outcomes are very small and that cross-state comparisons should be interpreted with caution. In the case of self-induction, in particular, we believe that it is still important to describe women's experiences with self-induction because very little data exist (with few exceptions) (Grossman et al., 2010; Jerman, Onda, & Jones, 2018; Upadhyay et al., 2018) about women's experiences with self-induction, especially unsuccessful self-induction attempts after which women continue their pregnancies. We note that there are some inconsistencies in reporting around self-induction attempts, i.e., that a few women who said they attempted self-induction did not report considering abortion, pointing to the importance of future research on this topic.

Fifth, Institutional Review Boards and recruitment sites required that we obtain parental permission for minors to participate in the study. As parental permission is not required for prenatal care, we anticipated that few minors would have a parent with them at their appointment and that those who did would not necessarily be a representative sample. We thus did not recruit participants younger than 18. It is possible minors were differently affected by some of the restrictions and our results do not capture those experiences. Sixth, there are important questions about generalizability. Our sample is primarily Black women, low-income women, and women in more urban settings. Their experiences may differ from White women, higher-income women, and women in rural settings. We do note, though, that the majority (about 75%) of women obtaining abortions in the USA are low-income and that the primary reason women report for obtaining an abortion is financial insecurity (Biggs, Gould, & Foster, 2013; Jerman, Jones, & Onda, 2016). This suggests that a prenatal care clinic serving low-income pregnant women may be a reasonable site from which to recruit samples who considered abortion and may have had challenges obtaining one. Our samples also are not representative of all women in their respective states.

This study also has a number of strengths. It is one of the first studies we are aware of to examine experiences of women who consider abortion, but may never present at an abortion clinic. Despite concerns that women may not disclose having considered abortion, we found a high proportion of women who reported having considered abortion and were willing to talk about their experiences. We also had high participation, with more than 85% participation in both states, and the two sites yielded demographically similar study populations.

In conclusion, recruiting in prenatal care is a feasible way to find women who considered abortion for this pregnancy, but did not visit an abortion clinic. Women's own preferences were the most common reason for not having an abortion across settings, but more women in Louisiana than Maryland did not obtain an abortion because of policy-related barriers to abortion.

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## Compliance with Ethical Standards

**Conflict of Interest** All authors declare that they have no conflict of interest.

**Ethical Approval** All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional review boards at the authors' universities and with the 1964 Helsinki declaration and its later amendments.

**Informed Consent** Informed consent was obtained from all individual participants included in the study.

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